Prometheus Radio Project

flame filching, wave snatching, people-powered radio!
info@prometheusradio.org, www.prometheusradio.org
PO Box 42158 Philadelphia, PA 19101 (215) 727-9620

4/22/2007

Prometheus Recommended Solutions For The LPFM Reconsideration (MM No. 99-25)

1. Encroachment of LPFMs

The Federal Communication Commission's recent action in MM Docket No. 05-210, (Commission determined that broadcasters' change in their community of license for full power stations would now be considered a minor modification, rather than a major modification) has exacerbated an existing issue threatening LPFM stations. LPFMs lack primary status, a standing which renders LPFM stations vulnerable to the movement of full power stations. If a full power station chooses to, they can take the channel of a LPFM station at will. At times these stations lose a portion of their already limited broadcasting radius; other times, the station's very existence is at stake.

Since the Commission has made it easier for full power stations to change their community of license, an accelerating number of LPFM stations (see attachment) are faced with the difficult situation of having to negotiate for their survival, with no compelling laws or policy to aid them in their search for a new frequency. These small stations often face very high engineering and legal costs to even understand their options and protect the few rights they have in this process. Even with a successful defense against encroachment, nothing will prevent the station from being encroached upon again.

With respect to full power stations, it is Prometheus' position that Low Power stations should have primary status. LPFM stations should not be allowed to be encroached upon by full power stations. It may have made sense in 2000, during the creation of LPFM, to think of these stations as "secondary, supplementary" services. In light of the abandonment of local production, and the advent of voice tracking and radio empires, this Commission rationale must adjust to the current reality. It is inexplicable when the only station in town willing to cover the city council meeting – or other local activities – is allowed to get knocked off simply because a Top 40 station wants to shift away from the old small town it serves and move a short distance to be closer to an emerging population center 30 miles away.

Solutions:

LPFMs and Full Power Stations, in order of efficacy for policy goals of localism:

A) Option one: Grant low power stations co-equal status with full power stations. LPFMs would be protected from displacement or new interference by full power station allocations and moves. New LPFMs would still be allowed to be allocated in locations that accept interference to the LPFMs in their predicted contours, when there are no other options for other channels. Primary status would apply to new interference caused to the LPFM.

B) Option two: Only allow a full power station to bump a low power station if there exists a channel of equal quality for the low power station to move to. The bumping station should (as part of their showing in their minor modification request) make the engineering showing of the viability

of a new channel for the LPFM, and pay the LPFM station's reasonable and prudent expenses for changing frequencies.

C) Option three: Only allow the full power station to bump a low power station if they can make a public interest showing, demonstrating that they will provide more locally originated public service programming than the LPFM does.

Additional Matter: A wholly inadequate, but mildly ameliorative measure that can supplement the above options also bears mention. The Audio Division has recently allowed KYRS-LP to change channels when faced with encroachment by a full power change of community of license that would have eliminated their signal. This has been an excellent first step towards one approach to fixing this problem in certain circumstances. The Audio Division granted waiver to the spacing rules on the second adjacent channel, because it was demonstrated that there was zero population in the small radius of potential second adjacent channel interference. This is a common practice for FM translators. The FCC required that the LPFM receive letters of support from the 2nd adjacent channels potentially affected. No such letters are required of FM translator stations. Indeed, KYRS first approached a different commercial station asking for a letter of support of a zero interference waiver, but was refused. We'd ask that the Audio Division conform to the existing practice with translators, and allow LPFMs to receive these waivers without permission from adjacent channel stations.

2. Spectrum Availability for LPFM

Of the hundreds of potential frequencies in urban areas that the Commission intended to allocate to Low Power FM in 2000, the vast majority of them will be given away to a handful of speculators if the rules are not changed surrounding translators. Since the Commission issued a report to Congress recommending completing the implementation of LPFM,it would be very ironic if there are no frequencies left for communities to apply for.

In March of 2003, the Commission opened a new window for applications for translator licenses. Translators are very similar to Low Power FM, fitting on many of the same potential frequencies. Translators cannot, however, originate their own programming; they must repeat the signal of a full power station. The translator system was designed in 1970 to help existing stations 'fill-in' coverage blocked by hills, mountains, and other geographic features that prevent stations from reaching their full city of license. Available frequencies for translators are governed under a more liberal set of rules than LPFM so it is often possible to get a translator frequency in locations where no LPFM is possible. From a physical standpoint, translators are nearly identical to LPFM radio stations. They use transmitters of similar power (from 10 to 250 watts), broadcast to similar ranges using the same equipment, and create similarly miniscule amounts of interference in the immediate vicinity of the transmitter site.

When allocating frequencies, the Commission puts translators essentially on par with Low Power applicants – on a first-come, first-serve basis. The Commission intended to give low power FM stations the first bite at this apple. Unfortunately, due to the delay caused by the MITRE study of the potential for 3rd adjacent channel interference imposed by Congress, the FCC just moved on and opened up a window for translator applications, allowing translators to skip the line. We believe that translators should have a "secondary" status with regard to locally based Low Power stations – if a bona fide local organization wants to use a channel for real, new, local broadcasting, they should not be pre-empted by a repeater. The licensing system as it stands gives preference to remote, out of state organizations looking to rebroadcast on thousands of channels nationwide, rather than to local entities who want just one community radio station.

Solutions, in order of efficacy for policy goals of localism:

A) Make LPFMs primary to translators, thus allowing local groups a second chance to utilize the spectrum inadvertently given to speculators in 2000. Allow LPFMs to displace these translators

in later filing windows.

B) Make LPFMs which chose to pledge 8 hours per day of locally originated programming primary to translators of stations which do not meet this standard. Allow “fill-in” translators of full power stations which meet the standards of 8 hours per day of local origination to be primary to LPFMs which do not meet these standards. Allow LPFMs that meet this criteria to displace translators of stations that do not meet these criteria. As an alternative to the 8 hours per day of local origination preference, also acceptable would be 3 hours per week of locally produced public affairs programming (similar to the standard used for LPTV). We would happily accept a higher number of hours of locally produced public affairs programming as the standard.

C) Make LPFMs primary to translators filed in the March, 2003 filing window, leaving earlier filed translators primary to subsequent filed LPFMs. 2003 window translators within 400 km or in the same state as their primary station could be exempt. Allow LPFMs to displace translators not meeting these criteria.

D) Allow new LPFMs pledging 8 hours of locally originated programming per day to take the frequency of a translator, when the translator has a viable frequency it can move to. Because translators have more spectrum availability options, they can often find channels where LPFMs can not.

Separately, we would ask the Commission to delay the AM translator in the FM band proceeding until the relationship between LPFMs and translators is sorted out. Or at least, we ask that the Commission decide upon the use of AM translators in the FM band at the same time as LPFM/translator priority.

3. Improve Engineering Tools Available To LPFMs

Currently, translators/repeaters are allowed to use a relatively accurate “contour prediction ” method, which allows engineers to take into account factors that affect radio propagation in the real world. Although low power FM stations are technically identical to repeaters/translators (even using the same models of transmitters and antennas), they are only permitted to submit the “minimum-distance” method of study for proper spacing. This not only overprotects other stations from LPFMs, but also has the strange and unintended effect of allowing non-local translators in thousands of places where low power, truly local stations are prohibited. If this were corrected, low power community stations could serve every city in the country, and truly fulfill the goals of localism. Low Power FMs should be allowed to use the same rules as translators and submit contour overlap studies when applying for licenses.

Solutions:

A. In future application windows, there should be two windows- a first for LPFM stations that are able to use the cheap and simple minimum distance method, and a second window where LPFMs can submit engineering studies using the more accurate contour studies and translator rules. These studies are expensive, but LPFMs are willing to bear this cost in places where no channel can be found using the minimum distance method. LPFMs allocated using the contour method would have the same technical burden as translators to address interference complaints. It has been pointed out that this can in some instances be burdensome, but LPFMs that get the benefit of using this method of allocation will be willing to accept the cost that goes with it.

B. The FCC uses several propagation models, such as Longley-Rice and Point to Point (version 2), that are even more accurate than contour prediction. Contour prediction is more accurate than minimum spacings, and Longley Rice and PTP are more accurate than contour overlap. These methods have successfully been adopted by the Commission in the DTV transition. We would heartily encourage the Commission to update it’s rules, using tools that the Commission already regularly uses in other radio applications, to improve the efficiency with which the FCC allocates FM channels. The National Translator Alliance and other entities have also asked the FCC to update it’s allocation methods.

To: Chairman Kevin J. Martin
Room: 8-B201
Federal Communications Commission
445 12th Street SW
Washington, D.C. 20554

From: Pete Tridish
Prometheus Radio Project
P.O. Box 42158
Philadelphia, PA 19101

Date: April 25, 2007

Subject: LPFMs under threat of encroachment from CCOL with available channels to move to

Due to the recent FCC rulemaking that allows Full Power Stations to obtain city of license changes by filing a minor change application, LPFMs around the country are being threatened with encroachment and the possibility that their station could be knocked off the air. The changes in community of license for full power stations not only threaten LPFMs across the country, but do not, in about half of the move-in cases, fulfill their responsibility to serve the local community of license but instead project there signal into an urban market. According to recent comments submitted in this proceeding by William Clay, in about half of all move-ins, the community of license is less than 1% of the station's covered audience.)

As per our recent conversation, Prometheus studied the stations that are currently under threat of encroachment.. Seventy-two stations are currently under new or increased threat of encroachment due to the CCOL applications from full power stations. Using the FCC LPFM Channel Finder tool (http://www.fcc.gov/mb/audio/lpfm/lpfm_channel_finder.html) we found that of these seventy-two stations, twenty-four have at least one channel available given the current spacing requirements for LPFMs. With full engineering reports, some of these frequencies may also prove to be unavailable. Thus, in at least two thirds of all cases some form of special waiver would be required.

In order to procure a waiver, several thousands of dollars of engineering and legal work is generally required. Only a handful of the LPFMs have been able to muster the needed resources to determine their fate. In at least one case, that of KPCN in Oregon, despite significant legal and engineering support, no channel change would be able to save the station. We will continue to find data on availability of channels in special waiver situations—however in the current situation it is safe to say that almost all the stations are finding it cost prohibitive to even discover what their options are. This bodes poorly as policy, when so many need expensive waivers in order to maintain the status quo.

If all of the applications for community of license are granted to full power stations, communities across the country will loose not only the valuable resource of a low power community station, but will

additionally lose the diversity of programming that the FCC is committed to.

Attached, you will find a list of the LPFM stations that have some level of threat .. Each station is listed by call sign, name, location, encroachment level and whether a channel is available under the LPFM rules.

Sincerely,
Elena Botkin-Levy
Pete Tridish
Prometheus Radio Project

Low power FM stations under threat of encroachment from full power move-ins from change in community of license applications:

LP-STATION	LOCATION	ENCROACHMENT LEVEL	CHANNEL AVAILABLE
Association of Community Resources and News	St George, UT	Red	no
Christian Hits Inc	Cincinnati, OH	City Grade	no
Cincinnati Community Radio	Cincinnati, OH	City Grade	no
Confederated Salish & Kootenai Tribes and Disaster & Emergency Services	Moise, MT	3rd Adjacent	yes
Edward Philip Cunningham	Cincinnati, OH	City Grade	no
Forest Hills School District	Cincinnati, OH	Major	no
KAMV Alianza Ministerial Vision Milenial	Brighton, CO	Orange	no
KCSA Concho Christmas Celebration	San Angelo, TX	City Grade	no
KCTQ Confederated Salish & Kootenai Tribes and Disaster & Emergency Services	Charlo, MT	Major	yes
KDEE California Black Chamber of Commerce	Sacramento, CA	Yellow	no
KDRT Davis Community Television	Davis, CA	City Grade	no
KEOE V.E. Leach Ministries	Lufkin, TX	Orange	yes
KESW Jefferson County Disaster & Emergency Services	Whitehall, MT	Orange	yes
KGJN State of Colorado Telecom Services	Grand Junction, CO	3rd Adjacent	no
KLBG Life at its Best Inc	Glide, OR	Orange	yes
KLPC Lone Pine Advent Believers	Lone Pine, CA	Major	yes

KMEA Galatin Christian Education Station	Bozeman, MT	City Grade	no
KNFS The Lorax Society	Tulare, CA	Orange	no
KPCA Petaluma Community Access	Petaluma, CA	3rd Adjacent	no
KPCN Pineros y Campesinos Unidos	Woodburn, OR	Major	no
KPCT State of Colorado Telecom Services	Parachute, CO	Orange	no
KPIE Community Information System	Dallas, OR	Yellow	no
KPVN Centro de Servicios Para Campesinos	Woodburn, OR	Major	no
KQRZ Heritage Christian School	Hillsboro, OR	City Grade	no
KQSO Western Oregon Radio Club	Dayton, OR	City Grade	no
KRBH Red Bluff Union High School District	Red Bluff, CA	Orange	yes
KRIM Payson Council for the Musical Arts	Payson, AZ	Red	yes
KRPC Sonoma State University	Rohnert Park, CA	3rd Adjacent	no
KRYH Power-Up Radio	Temple, TX	Orange	no
KSHC St. Helena Good News Broadcasting	Angwin, CA	Orange	no
KSMK St. Mary's Academy Home Study School Association	St. Marys, KS	City Grade	yes
KSTG Lodi Christian Radio	Lodi, CA	orange	no
KTGC St. Regis Public School	St. Regis, MT	Yellow	yes
KTPJ Hope Radio of Pueblo Corp	Pueblo, CO	Major	no
KTRL Tarlton State University	Stevenville, TX	3rd Adjacent	yes
KWSP Home Town Communications	Kerrville, TX	Orange	yes
KYRR Steven J Michelsen Trust	Nevada City, CA	Yellow	yes
Media Bridges	Cincinnati, OH	City Grade	no
MKWS Inc	Cincinnati, OH	City Grade	no
O'Conner Communications Inc	Cincinnati, OH	City Grade	no
Our Lady of the Holy Spirit	Norwood, OH	City Grade	no
Peace and Justice Center	Burlington, VT	Orange	no
Public Radio of Camp Dennison	Indian Hill, OH	Major	no
Shoreham Broadcasting Corp	Shoreham, NY	City Grade	no
The Nathan B Stubblefield Wireless Group	Cincinnati, OH	City Grade	no
United Universal Fellowship	Cincinnati, OH	City Grade	no
Victory Church	Cincinnati, OH	City Grade	no
WBYJ Burlington Christian Radio Inc	Burlington, NC	Orange	yes

WCFQ Standing in the Gap	Inverness, FL	Major	yes
WCFY Christian Fellowship Church	Evansville , IN	Orange	no
WCGR Groveport Madison Local School District	Groveport, OH	Red	no
WCPL First Baptist Church of Merritt Island	Merritt Island, FL	Yellow	no
WCRC Community Refugee and Immigration Services	Columbus, OH	City Grade	no
WCRS Simply Living	Columbus, OH	City Grade	no
WCRX Bexley Public Radio Foundation	Columbus, OH	City Grade	no
WDTF Defenders of the Faith	Berkeley Springs, WV	Yellow	yes
WEKJ Christian Radio Network	Homosassa, FL	City Grade	yes
WEVT Spavin Cure Historical Society	Enosburg, VT	Orange	yes
WFBO Halifax Christian Community Church	Flager Beach, FL	3rd Adjace nt	yes
WFLP State of Florida	Collier Co, FL	Yellow	yes
WFWC Fremont United Methodist Church	Fremont, NC	Yellow	yes
WGNH Gethsemane Anabaptist Church	Lexington, SC	Major	no
WHCK Essence of Love Ministries	Hopewell, VA	Yellow	no
WINF Delaware County Development Co	Delaware, OH	Major	no
WJFY Newark Area Christian Broadcasting	Neward, OH	Orange	no
WLEZ Mississippi international Film and Video Festival	Jackson, MS	Red	no
WMCC Radio 7 Company	Spencer, WV	Yellow	yes
WRZO Dack Inc	Chambersbu rg, PA	City Grade	no
WSKM Crossgates Baptist Church	Brandon, MS	Orange	no
WUCR Synewave Communications	Lake Butler, FL	3rd Adjace nt	yes
WUFR Communication Arts Center	Umatilla, FL	Red	no
WVLG The Villages Chamber of Commerce	The Villages, FL	Yellow	no
WYOU New Horizons 3000	Williamsbu rg, VA	Red	no
WZKO Hodges Women in Broadcasting Club	Hodges, SC	Yellow	yes

Encroachment Explained

Encroachment occurs when an FM station having primary status (i.e. any commercial station) moves its transmitting site closer to an LPFM. The level and effects of the encroachment vary depending on how close the move brings the full power to the LPFM. It may mean that the LPFM

could lose some signal coverage, or even be forced to shut down the station. Since Low Power FM is a secondary service in relation to Full Power stations, LPFMs have to give way to full power in the event they want to move their location closer, or if they want to change their frequency. It doesn't matter if the LPFM was there first. There are a few different levels of encroachment depending on how close the full power station is moving to the LPFM.

3rd adjacent warning: The full power station's service contour has overlapped into the very small LPFM's interference contour. LPFMs may be required to resolve interference problems addressed in §73.810.

3rd adjacent advisory: The 20 km buffer zone around the full power station's protected service contour has overlapped the LPFM's third adjacent channel interference contour. Although unlikely the LPFM will receive interference complaints it is very possible that listeners with radios of poor design may not receive the station in fringe areas.

yellow: When the interference contour of the full power station overlaps with the LPFM's service contour. Yellow encroachment only displays on co-channel and higher powered first adjacent channel stations. Based on the full power station's location and the terrain between it and the LPFM, the LPFM may experience interference in the direction of the encroaching station.

orange: When the LPFM's interference overlaps into the buffer zone located 20 km beyond a full power station's protected contour. The FCC created the buffer zone to allow LPFM stations to stay on the air even if full power stations make short moves. While this operation may still be legal, the LPFM station may encounter more interference from the full power station resulting in a smaller coverage area. No new LPFM stations would be licensed in this area.

red: The full power FM station's primary service contour has overlapped the interference contour of the LPFM. LPFM stations with a red encroachment on the co-channel or first adjacent channel could suffer significant interference and may receive interference complaints from the full power station. Red encroachment on the second adjacent channel could result in a decreased coverage area, especially from listeners with less selective analog receivers. This can also impact the LPFM's future ability to launch an effective IBOC service (if the FCC continues allowing IBOC).

major: The 60 dBu protected service contours of both the full power and LPFM stations overlap. For non-commercial stations, this is considered interference per §73.809(a)(3). For commercial stations, §73.809(a)(1) and (2) state that interference in the full power station's city grade (70 dBu) or within the community of license is considered legal interference. For IF channels (+/- 10.6 and 10.8 MHz), MAJOR will also be displayed if the 91dBu contours of the full power and the LPFM station overlap. LPFMs receiving a MAJOR message should start immediately considering remedial action or preparing a demonstration on how the LPFM will not cause interference to the proposed full power facility. MAJOR does not mean the end of your station, especially if the MAJOR message appears on second adjacent,

but it means you need to do some serious thinking about your next move.

city grade: The 70 dBu City Grade contour of the full power FM station overlaps into the service contour of the LPFM station. This is legal interference under §73.809(a). LPFM stations should prepare for a possible complaint from the full power station and should start looking to make their next move.

Sources:
FCC Low Power FM (LPFM) Radio Channel Finder
http://www.fcc.gov/mb/audio/lpfm/lpfm_channel_finder.html

Recnet.com

Prometheus Radio Project

Radio Project
roposed Rulemaking,

flame filching, wave snatching, people-powered radio!
info@prometheusradio.org, www.prometheusradio.org
PO Box 42158 Philadelphia, PA 19101 (215) 727-9620

Michelle Carey, Senior Legal Advisor
Commissioner Deborah Taylor Tate
Chris Robbins, Acting Legal Advisor,
Commissioner Robert McDowell
Legal Advisor Cristina Chou Pauze
Commissioner Jonathan Adelstein
Legal Advisor Rudy Brioche
Commissioner Michael Copps
Legal Advisor Bruce Gottlieb
Audio Division Chief Peter Doyle

Pursuant to Section 1.1206(b), 47 C.F.R. §1.1206(b) of the Commission's rules, this letter,with attachments, is being filed electronically with your office today.

Respectfully submitted,
Pete Tridish